

ERWS Salt Marsh Wayside Panel (Draft)



© Coastal Conservancy 2003

What it Takes. To Survive in a Salt Marsh

Although you see abundant plant life here, the salt marsh can be a *challenging* place for plants to live. These plants have *unique* ways in which they are able to survive.

It takes extra salt to soak up a lot of water

Plants that are exposed to salt can get dried out, just like you might after a swim in the ocean. However, salt marsh plants, or *halophytes*, store salt to get the water they need to grow and to not get dried out. Since water is attracted to salt and halophytes hold more salt than the surrounding soil, needed water is drawn out of the soil and into the plants.



Salt Grass



Pickleweed

If a halophyte holds *too* much salt, it will get rid of it. Salt grass excretes extra salt through glands like you excrete sweat. The salt form crystals on the blades and water washes them away. In pickleweed, salt is forced to its tips which break off. In the fall you can see the vibrant red pickleweed tips that are ready to break.



Chilean cordgrass is a non-native plant that was introduced from Chile and overruns the native plants of Humboldt Bay salt marshes including rare and threatened species.

It takes hollow stems to get air

Do you know how it feels to be underwater and not be able to breathe? During high tide, many plants are submerged and their access to adequate oxygen is limited. Many halophytes have *hollow stems* through which air can flow through, like a snorkel, from the top of the plant that sticks out of the water to the submerged roots.

Surviving in Zones

More than 20 species of native plants survive in the Humboldt Bay salt marshes. The amount of salt and water in different areas or zones in the marsh limit what kinds of plants can grow in those zones.



Humboldt Bay owl's clover is a rare plant that grows in the highest areas of the salt marsh where salinity levels are the lowest.



The rare Point Reyes bird's beak survives just above where regular tides flood the salt marsh and there is some salinity.



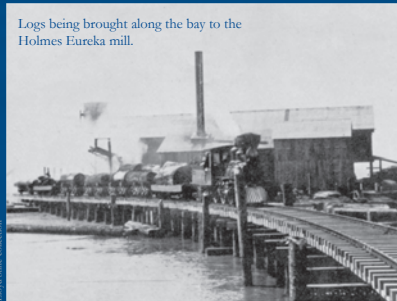
Around Humboldt Bay, pickleweed survives in the lowest, wettest, and saltiest areas of the salt marsh.



ERWS Ship & Rail Panel (Draft)

Rails Led Timber to the Bay

Logs being brought along the bay to the Holmes Eureka mill.



Most of the tracks and ties are long gone, but you are standing on part of Humboldt County's railroad history. This spot was once part of the *Bucksport and Elk River Railroad* which pulled cars piled with logs and milled lumber out of the *isolated* Elk River valley to the mills and docks in Eureka.



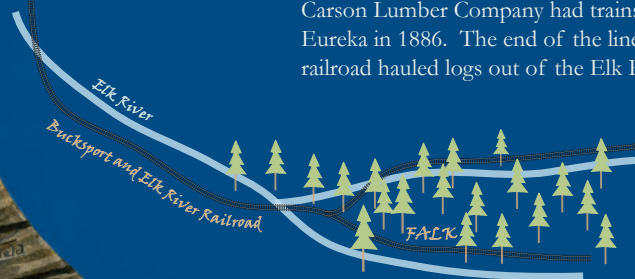
Flash-flood delivery

Before the railroad, logs were transported out of the Elk River valley by piling them in the river bed in front of a temporary dam during the dry season, then blowing up the dam after the rains came to send a wall of water and tons of logs down river. Landowners down river opposed the transportation method known as "flash-flood delivery."

Making the connection

In 1882, the owners of the Elk River Mill and Lumber Company began making headway in the *evolution of a railroad*. The line would connect their lumber mill on the south fork of the Elk River in the town of Falk and the shipping docks in Eureka, eight miles downriver. Funds were short, however, and the owners had to sell the railroad before construction had even begun.

EUREKA
BUCKSPORT



Two other companies that realized the *need for a rail line* in the valley took over the railroad project. After enduring financial trouble of their own, the California Redwood Company and the Carson Lumber Company had trains running between Falk and Eureka in 1886. The end of the line came in early 1953, when the railroad hauled logs out of the Elk River valley for the *last time*.

An early B&ERR train with Engine #1 on the front and Engine #2 on the rear.



Lloyd Stone Collection



ERWS Welcome Kiosk Panel (Draft)

Discover the Sanctuary within City Limits

Welcome

Although you are within the city limits of Eureka, you have stepped into a sanctuary for *wildlife, plants, and the stories of local culture and history*. The Elk River Wildlife Sanctuary is a unique part of Humboldt Bay that has been set aside to protect all that live and visit here.

A Sanctuary for Plants & Animals

The *estuary*, where the Elk River meets Humboldt Bay, is swarming with life including some *rare, threatened and endangered species*. Its sandy spit and mudflats are lush with plants and provide rest areas and feeding grounds for resident and migrating birds. The estuary's channel leads the way up river for salmon, and it is rich with *food* for marine mammals.



The Elk River Wildlife Sanctuary includes nearly 300 acres of wildlife area. The estuary, mudflats, and sandy spit provide homes for hundreds of resident and migrating birds, marine mammals, fish, and plants. The Elk River flows to the bay from its source in the Headwaters Forest Reserve about eight miles east of Eureka.



An Ancestral Home of an Ancient Culture

The Wiyot people are the original inhabitants of this region, and they call the Elk River area of Humboldt Bay *Iksori*. Their ancestors gathered food such as crab, clams, eel, salmon, and shell fish in the Elk River estuary and the rest of the bay. They lived in redwood plank homes and traveled in canoes dug out of fallen redwoods. This area remains *sacred* to the Wiyot.

A Jewel to be Kept Healthy

The wastewater treatment plant adjacent to the Sanctuary, *cleans* the sewer water from the entire city of Eureka before it is released into Humboldt Bay. Sewage treatment is a multi-stage process that makes water as clean as possible before it enters the bay. The process *removes pollutants* that may cause harm to the bay, plants and animals, and people who use the bay or live around it.



Jennifer Ruse

The Elk River Wildlife Sanctuary is jointly owned by the City of Eureka and California Department of Fish and Game. The City of Eureka manages this area which serves as a wastewater treatment facility, wildlife habitat, and recreational access site.



The Elk River Wildlife Sanctuary is a place for all,
please tread lightly during your visit.

